

AMENDMENTS TO THE CLAIMS:

Note that all the claims currently pending in this application have been reproduced below for the Examiner's convenience.

1 - 12. (Canceled)

13. (Previously Presented) A sheet punching device, which cuts holes in a sheet conveyed at predetermined intervals while punches are entering die holes, said sheet punching device comprising:

a plurality of punch trains, each of which includes a plurality of said punches axially aligned on a rotating shaft and projecting in a radial direction of said shaft; and

a plurality of initial position detecting sensors, which are disposed in correspondence with said plurality of punch trains respectively, and detect an initial position of each of said plurality of punch trains in a rotation direction of said shaft,

wherein said plurality of punch trains are disposed with a phase difference in the rotation direction of said shaft relative to one another, and said die holes are disposed in correspondence with said plurality of punches,

wherein one of said plurality of punch trains is selectively used in cutting holes in the sheet at a predetermined timing corresponding to sheet conveyance intervals, and

wherein one of said plurality of punch trains selected for use, is set at the initial position based on a signal from said plurality of initial position detecting sensors.

14. (Previously Presented) A sheet punching device according to Claim 13, further comprising a sheet end detecting sensor, which detects an end of the sheet.

15. (Previously Presented) A sheet punching device according to Claim 13, wherein said plurality of punches and said die holes are rotated in synchronism with each other to cut holes in the sheet.

16. (Previously Presented) A sheet punching device according to Claim 14, wherein after said sheet end detecting sensor detects a trailing end of the sheet, one of said plurality of punch trains cuts holes in the vicinity of the trailing end of the sheet based on signals from said sheet end detecting sensor.

17. (Previously Presented) A sheet punching device according to Claim 13, wherein numbers of said plurality of punches in said plurality of punch trains are different from each other.

18. (Previously Presented) A sheet punching device, which punches holes in a sheet conveyed at predetermined intervals while punches are entering die holes, said sheet punching device comprising:

a first rotatable shaft;

a plurality of punch trains disposed on said first shaft,

wherein each of said plurality of punch trains includes a plurality of punches extending radially from said first shaft, and

wherein said plurality of punches are arranged in parallel with one another in an axial direction of said first shaft;

a plurality of initial position detecting sensors, which are disposed in correspondence with said plurality of punch trains respectively, and detect an initial position of each of said plurality of punch trains in a rotation direction of said first shaft;

a second rotatable shaft; and

a plurality of die holes disposed on said second shaft,

wherein one of said plurality of punch trains is selectively used in cutting holes in the sheet at a predetermined timing corresponding to sheet conveyance intervals, and

wherein one of said plurality of punch trains selected for use, is set at the initial position based on a from said plurality of initial position detecting sensors.

19. (Previously Presented) A sheet punching device according to Claim 18, further comprising a sheet end detecting sensor which detects an end of the sheet.

20. (Previously Presented) A sheet punching device according to Claim 18, wherein said plurality of punches and said plurality of die holes are rotated in synchronism with each other to cut holes in the sheet.

21. (Previously Presented) A sheet punching device according to Claim 19, wherein after said sheet end detecting sensor detects a trailing end of the sheet, one of said plurality of punch trains cuts holes in the sheet in the vicinity of the trailing end of the sheet based on signals from said sheet end detecting sensor.

22. (Previously Presented) A sheet punching device according to Claim 18, wherein numbers of said plurality of punches in said plurality of punch trains are different from each other.

23. (Previously Presented) A sheet punching device, which cuts holes in a sheet conveyed at predetermined intervals while punches are entering die holes, said sheet punching device comprising:

a plurality of punch trains, each of which includes a plurality of said punches axially aligned on a rotating shaft and projecting in a radial direction of said shaft,

wherein said plurality of punch trains are disposed with a phase difference in a rotation direction of said shaft relative to one another, and said die holes are disposed in correspondence with said plurality of punches,

wherein numbers of said plurality of punches in said plurality of punch trains are different from each other,

wherein one of said plurality of punch trains is selectively used in cutting holes in the sheet, and

wherein after the sheet in which holes are cut by the one of said plurality of punch trains has passed, punches of another of said plurality of punch trains and die holes are engaged with one another during the predetermined intervals.

24. (Previously Presented) A sheet punching device according to Claim 23, further comprising a sheet end detecting sensor, which detects an end of the sheet.

25. (Previously Presented) A sheet punching device according to Claim 23, further comprising an initial position detecting sensor, which detects an initial position of each of said plurality of punch trains in a rotation direction of said shaft,

wherein one of said plurality of punch trains selected for use is set at the initial position based on a signal from said initial position detecting sensor.

26. (Previously Presented) A sheet punching device according to Claim 24, wherein said sheet end detecting sensor detects a trailing end of the sheet, and one of said plurality of punch trains cuts holes in the sheet in the vicinity of the trailing end of the sheet.